



PATENT
02581-P0045A WWW/HML

AF/3731

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	Hubert Manhes
Serial No. 09/214,875	Filing Date: April 19, 1999
Title of Application:	Trocar Sleeve For Endoscopic Applications
Confirmation No. 8095	Group Art Unit: 3731
Examiner	Vy Q. Bui

Mail Stop Appeal Brief-Patents
Commissioner for Patents
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Transmittal Of Appeal Brief

Dear Sir:

Applicant hereby appeals to the Board from the Office Action, mailed May 16, 2003, finally rejecting claims 24-31, all pending claims in the application.

1. **Appeal Brief.** Transmitted herewith, in triplicate, is the Appeal Brief with respect to the Notice of Appeal filed August 14, 2003.
2. **Fee for Filing Appeal Brief.** Pursuant to 37 C.F.R. 1.17(E), the fee for filing the Appeal Brief is \$320.00.

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September 25, 2003


Linda A. Ferranti

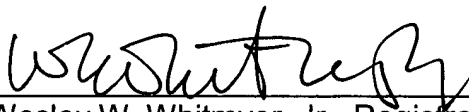
3. **Time To Reply.** The Notice of Appeal was filed on August 14, 2003. The time to file the Appeal Brief is within 2 months from the date thereof. Thus, this Appeal Brief is timely filed on or before October 14, 2003.

4. **Request for an Oral Hearing.** Applicant previously requested and paid the fee for an Oral Hearing when filing the Notice of Appeal.

5. **Fee Payment.** Attached is a check in the amount of \$320.00. This is also a petition and a request to charge to Account No. 19-4516 for any additional extension and/or fee as may be required or credit for any excess fee paid.

Respectfully submitted,

September 25, 2003



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PATENT
02581-P0045A WWW/TMO/HML

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re The Application Of

Hubert Manhes

Serial No.: 09/214,875

Filed: April 19, 1999

For: Trocar Sleeve For Endoscopic
Applications

Examiner: Vy Q. Bui

Group Art Unit: 3731

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Appeal Brief Under 37 C.F.R. §1.192

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Dear Sir:

Having filed a Notice of Appeal from the final rejection of claims 24-31, all of the claims currently pending, the final rejection being mailed on May 16, 2003, Appellant submits its Appeal Brief for the above-captioned application pursuant to 37 C.F.R. §1.192 in triplicate as follows.

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September 25, 2003

Real Party in Interest

The real party in interest is Karl Storz GmbH & Co. KG residing at Mittelstrasse 8; D-78532 Tuttlingen, Germany.

Related Appeals and Interferences

There are no related appeals or interferences.

Status Of Claims

Claims 24-31 are currently pending, stand rejected and are the subject of the instant Appeal. A copy of each of these claims is attached hereto as Exhibit A.

Status Of Amendments

Subsequent to the Final Rejection being mailed on May 16, 2003, Appellant filed a Response to Final Official Action on July 16, 2003. This Response to Final Official Action contained only arguments for patentability, and no amendments to the claims. The Response to Final Official Action was considered but did not place the application in condition for allowance according to the Examiner in the July 29, 2003 Advisory Action.

Summary Of Invention

As described in the specification, Appellant discloses and claims a trocar sleeve 1 for endoscopic applications, comprising an elongate part having at least

one passage 2 for insertion for a surgical instrument, and pivotable parts 11,12 formed at a distal section of the elongate part. The pivotable parts 11,12 each have a blade end portion and converge toward one another so that the blade ends portions form a pointed tip which permits the cutting of the body wall without an additional trocar mandrel.

References Cited And Applied

U.S. Patent No. 5,354,302 to Ko

U.S. Patent No. 5,320,627 to Sorensen *et al.*

Grounds Of Rejection

Claims 24-25 and 28- 31 stand rejected under 35 U.S.C. §102 (b) as anticipated by or, in the alternative, under 35 U.S.C 103(a) as obvious over U.S. Patent No. 5,354,302 to Ko.

Claims 26-27 stand rejected under 35 U.S.C 103(a) as unpatentable over Ko in view of U.S. Patent No. 5,320,627 to Sorensen *et al.*

Issues Presented For Review

(1) Whether the prior art reference teaches or suggests each of the structural limitations to one skilled in the art.

(2) Whether it would be obvious to modify prior art reference in a way which is clearly repugnant to the express teachings thereof.

Grouping of Claims

The claims do not stand or fall together. Claims 24 and 30 require a combination of material elements. Claims 25-29 each add specific additional novel elements to the novel combination of the independent Claim 24, and claim 31 adds specific additional novel elements to the novel combination of the independent Claim 30. As such, all claims must be considered because it is improper to fail to consider any limitation in the claims. In re Geerdes, 491 F.2d 1260, 1262, 180 U.S.P.Q. 789, the 791 (CCPA 1974) ("every limitation in the claim must be given effect rather than considering one in isolation from the others").

Argument

The cited prior art does not anticipate or render obvious the claims of the present invention as it does not disclose, at least, the blade end portions converging to form a pointed tip that permits the cutting of the body wall without any additional instrument, as required by claim 24 and dependent claims 25-31.

In rejecting claims 24-25 and 28-31 under 35 U.S.C. §102 (b) or alternatively, under 35 U.S.C 103(a), the Examiner cites Ko for disclosing a metal penetration end 18 as blunt, because of the rounded conical shape of the penetration end 18 in general, but also, as having a pointed tip (shown in Figure 2 and recited in claims 1 and 30). The Examiner states that "'blunt' is a relative term and one of ordinary skill in the art at the time of the invention would not

consider the rounded conical penetration end 18 as not capable of piercing a tissue.” (See Advisory Action dated July 29, 2003, p. 2) Even if a blunt object or tip when pushed against tissue may inadvertently pierce through it in a rudimentary fashion, this does amount to cutting. Hence, use of such a blunt tip would not be considered by one of skill in the art as a feasible or appropriate means to achieve cutting. The definition of the verb “cut” is to:

1. divide something with **sharp** tool: to divide something into pieces using a knife, scissors, or a similar **sharp-edged** tool
2. sever using sharp tool: to sever something or separate a part of something using a **sharp-edged** tool such as a knife, scissors, or a saw
3. make a hole in something: to pierce something or make a hole in something using a **sharp** instrument

(See definitions #1, #2 & #3 attached at Exhibit B). Cutting requires use of sharp-edged object. By definition, it is impossible to use a blunt object to achieve cutting. Inadvertent piercing by a blunt tip, likely resulting in a puncture or tear without precision, does not amount to cutting.

Further, while the Examiner asserts that the penetration end 18 of Ko is capable of piercing the body wall itself, it contains no such suggestion, but rather, an explicit teaching away from it being used in such manner. The penetration end 18 of Ko is blunt for the purpose of inserting in an pre-existing opening in the body. Ko specifically teaches a plurality of resilient wedge portions that form substantially “a blunt penetration end 18 (or tissue distending mechanism) that may be inserted through an opening in the body.” Column 5, lines 35-43. This closed blunt end must be first inserted, and then subsequently

opened, in order to push through and dissect tissue. ("The opening of the wedge section causes distending of the tissue surrounding the outer surface of the wedge sections." See Ko, col. 8, lines 49-51.) This can be easily seen in the figure included by the Examiner in the May 16, 2003 Office Action in which the call-out for "Pointed tip for penetration of various layers of tissue" points to one of the wedge sections 22a-22d when in the open position (as illustrated by phantom lines). Thus, even the Examiner apparently recognizes that when closed for insertion, the wedge sections 22a-22d defining a blunt tip are not meant to penetrate. The opened wedge portions 22a-22d of the penetration end 18 which allow the Ko device to dissect and penetrate through tissue makes the device structurally different from the present invention as claimed, which requires a pointed tip formed by pivotable parts with blade end portions to permit cutting of the body wall.

Unlike Ko, the present invention does not require additional steps and/or devices to cut the body wall or tissue. The present invention purposely functions to initially cut body skin or body wall, whereas the tissue distending function of Ko occurs after an incision is made, the dissectoscope is inserted, and the wedge sections are opened. (To use the dissectoscope 10, an incision is made in the skin sufficient to allow the outer sleeve 12 to be inserted through the opening caused by the incision. Ko, col. 8, lines 37-40). While the Examiner states that it would be reasonable for one of skill in the art to recognize that the penetration end 18 can be used to cut the body wall itself, Applicant respectfully

disagrees as the disclosure of the patent specifically teaches one of skill in the art away from this by stating that an incision first must be made in the skin and that the penetration end 18 (or tissue distending mechanism) is blunt.

Although not addressed in Examiner's Advisory Action dated July 29, 2003, in finally rejecting claims 26-27 in the under 35 U.S.C 103(a), the Examiner has previously cited Ko in view of Sorensen *et al.*.

Sorensen *et al.* does not disclose, teach or suggest the pivotable parts converging toward one another in a piercing position, wherein the blade end portions of the pivotable parts form the pointed tip to achieve cutting as required by claim 24 of the present invention, and all of its dependent claims, including claims 26-27. In contrast, Sorensen *et al.* discloses tip members that do not themselves cut, but rather, to prevent inadvertent puncture, by forming a protective cage around the cutting head. Column 7, lines 63-67. These members function separately from the cutting head and there is no suggestion to use their tip members to cut.

Sorensen *et al.* does not teach or suggest the pointed tip for cutting which is also disclosure in Ko lacks, as such it cannot correct this deficiency in Ko to render any of the claims obvious. Further, Sorensen *et al.* does not disclose the novel, non-obvious elements of the spring-biased joints of the pivotable parts of dependent claims 26-27 to render these claims obvious in light of Ko.

The Examiner specifically cites Sorensen *et al.* for disclosure of spring-biased joints biasing the pivotable parts away from one another to an operative position upon displacement of an elongate cutting tool 142 along a passage/lumen of trocar 103 and asserts that it would be obvious to provide such joints to bias the pivotable parts of Ko away from one another in operative position. Sorensen *et al.* requires insertion/displacement of another instrument, a cutting tool, to bias the pivotable tip members away from one another in operative position. In contrast, the spring-biased joints of claims 26-27 of the present invention bias the pivotable parts away from one another to an operative position upon displacement of the *instrument itself* along the passage. There is no requirement for use of another instrument to bias the tip, as in Sorensen *et al.* As such, Sorensen *et al.* does not render obvious claims 26-27 spring biased joints of the pivotable parts, and in fact, teaches away from such pivotable parts which do not require use of an additional instrument to be placed in operative position.

Sorensen *et al.* teaches away from the present invention in which the claimed device itself cuts the body wall. The Sorensen *et al.* device is to be inserted through an existing orifice or small incision. Column 1, lines 12-14, also column 4, lines 32-35. This same limitation of requiring a pre-existing incision is taught by Sorensen *et al.* in the operation of the first embodiment. Column 11, lines 36-40.

Additionally, there is no motivation to combine Sorensen *et al.* with Ko. Even if such combination is made, it does not render obvious claims 26-27. Specifically, there is no suggestion to incorporate the spring biased joints of Sorensen *et al.* into the pivotable parts of Ko, as the Examiner asserts, as they are diametric in function. The spring-biased joints of Sorensen *et al.* function to place the tip members in open configuration so that they form a protective cage around the rotary cutting head (col. 11, lines 65-66) in order to “prevent or minimize the likelihood of inadvertent puncture of the surrounding containment sac or organ” (col. 13, lines 49-53). In contrast, the pivotal parts of Ko, as cited by the Examiner, function to dissect tissue. It is not logical to combine a feature that allows caging of the head (to prevent inadvertent puncture) into a device with a tip functioning to distend or dissect tissue. Combination of this feature of Sorensen *et al.* into the invention of Ko would result in an inoperative device.

There is no disclosure in Sorensen *et. al.* of the providing spring-biased joints in the pivotable parts which form a pointed tip that allows for cutting the body wall without use of an additional instrument. Therefore, Applicant asserts that claims 26-27 are independently non-obvious.

Conclusion

Appellant has made a significant advance over the prior art by providing a trocar sleeve for endoscopic applications comprising an elongate part having at least one passage for insertion for a surgical instrument, and pivotable parts

formed at a distal section of the elongate part, each having blade end portions to form a pointed tip and permit the cutting of a body wall without an additional trocar mandrel. Accordingly, reconsideration and allowance of all pending claims is believed in order, and such action is earnestly solicited.

September 25, 2003

Respectfully submitted,



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Attorneys for Appellant

EXHIBIT A - Pending Claims

24. Trocar sleeve for endoscopic applications, comprising:
- an elongate part having at least one passage for insertion of a surgical instrument, and
- pivotal parts formed at a distal section of the elongate part, each having a blade end portion, the pivotal parts converging toward one another in a piercing position, wherein the blade end portions of the pivotal parts form a pointed tip which permits the cutting of a body wall without an additional trocar mandrel.
25. The trocar sleeve defined in claim 24 wherein the distal section of the elongate part has a plurality of spring-biased joints between the elongate part and the pivotal parts for biasing the pivotal parts toward the piercing position.
26. The trocar sleeve defined in claim 25 wherein the spring-biased joints bias the pivotal parts away from one another to an operative position upon displacement of the surgical instrument along one passage after cutting the body wall.
27. The trocar sleeve defined in claim 26 wherein the pivotal parts bear against an inner side of the body wall in the operative position.
28. The trocar sleeve defined in claim 24 wherein each of the pivotal parts is configured as a wing.
29. The trocar sleeve defined in claim 25 wherein each of the spring-biased joints acts upon a respective individual pivotal part.

30. Trocar sleeve for endoscopic applications, comprising:
an elongate part having at least one passage for insertion of a surgical instrument, and
pivotal parts formed at a distal section of the elongate part, each having a blade end portion, the pivotal parts converging toward one another in a piercing position, wherein the blade end portions of the pivotal parts form a pointed tip which permits the cutting of the body wall without an additional trocar mandrel and wherein the distal section has a flange bearing against an outer side of the body wall.
31. The trocar sleeve defined in claim 30 wherein the flange is displaceable along the distal section of the elongate part.

EXHIBIT B

See attached Definitions from

Encarta® World English Dictionary, North American Ed., Microsoft Corp., 2003

<http://encarta.msn.com/encnet/features/dictionary/dictionaryhome.aspx>

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Dictionaries

cut [kut]

verb (past **cut**, past participle **cut**, present participle **cut-ting**, 3rd person present singular **cuts**)

1. *transitive and intransitive verb* **divide something with sharp tool**: to divide something into pieces using a knife, scissors, or a similar sharp-edged tool
2. *transitive verb* **sever using sharp tool**: to sever something or separate a part of something using a sharp-edged tool such as a knife, scissors, or a saw
 - *cut a slice of bread*
3. *transitive and intransitive verb* **make hole in something**: to pierce something or make a hole in something using a sharp instrument
4. *intransitive verb* **be sharp**: to be sharp enough to slice or pierce things easily
 - *These scissors won't cut.*
5. *intransitive verb* **yield to blade**: to be easily sliced or pierced by a sharp tool such as a knife
 - *The cheese cuts well and doesn't crumble.*
6. *transitive verb* **MEDICINE injure with sharp edge**: to injure yourself or somebody with something sharp, usually enough to draw blood
7. *transitive verb* **shorten with sharp tool**: to make something shorter by removing some of it with a sharp tool such as scissors
 - *I'm having my hair cut this afternoon.*
8. *transitive verb* **FASHION fashion a garment**: to shape fabric in a particular way in order to fashion a garment
 - *a skirt cut on the bias*
9. *intransitive verb* **take or be a shortcut**: to cross, travel, or make a line through or across an area, especially in order to save time
 - *This path cuts through the woods.*
10. *transitive verb* **reduce a quantity**: to reduce an amount, for example, of money or time, or remove an amount from something
 - *The budget cannot be cut any further without reducing services.*
11. *transitive verb* **shorten by editing**: to make a film, text, play, broadcast, or speech shorter by removing parts of it, or remove a part to make it shorter
12. *transitive and intransitive verb* **COMPUTING delete data**: to delete data from one place, usually with the intention of inserting it in another
13. *transitive and intransitive verb* **CINEMA BROADCASTING edit movie or video**: to edit a movie or other work intended for performance or broadcast
14. *intransitive verb* **CINEMA stop filming**: to stop filming a particular scene (*usually used as a command*)



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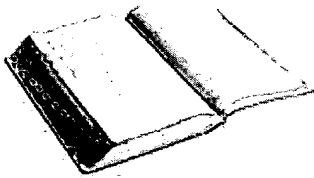
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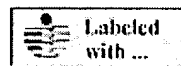
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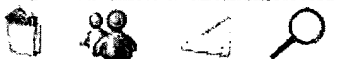
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